

U S WEST, Inc.  
Suite 700  
1020 Nineteenth Street, NW  
Washington, DC 20036  
202 429-3134  
FAX 202 296-5157

JOCKET FILE COPY ORIGINAL

**USWEST**

Elridge A. Stafford  
Executive Director-  
Federal Regulatory

EX PARTE OFFICE FILED

**EX PARTE**

September 4, 1997

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, NW, Room 222, SC-1170  
Washington, DC 20554

RECEIVED  
SEP - 4 1997  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

RE: Amendment of the Commission's Rules To Permit Flexible  
Service Offerings in the Commercial Mobile Radio Services  
CC Docket 96-6

Dear Mr. Caton:

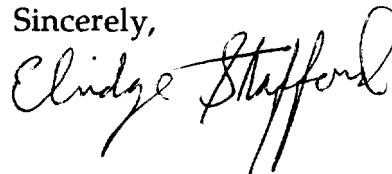
Today, Julia Kane; Laurie Bennett and the undersigned of U S WEST and Kathryn Zachem of Wilkinson Barker, Knauer & Quinn met with Rosalind Allen; David Furth; Karen Gulick; Shaun Maher; Jeanine Poltronieri and Mika Savir of the Wireless Telecommunications Bureau and Aliza Katz of the Office of General Counsel to discuss the above-referenced proceeding. Attached are handouts that were the basis for discussion at this meeting.

In accordance with Commission Rule 1.1206(a)(2), an original and one copy of this letter and the attachments are being filed with your office for inclusion in the public record.

Acknowledgment and date of receipt of this submission are requested. A copy of this transmittal letter is provided for this purpose.

Please call if you have questions.

Sincerely,



**Attachments**

cc:	Rosalind Allen	Shaun Maher
	David Furth	Jeanine Poltronieri
	Karen Gulick	Mika Savir
	Aliza Katz	

No. of Copies rec'd  
List ABCDE

021

**U S WEST, Inc.**

**FCC Presentation  
WT Docket No. 96-6**

**September 4, 1997**

## **Regulatory Classification of Fixed Wireless Services**

(1 of 2)

- **Threshold matter:** The “what is fixed services” debate should not affect one basic premise -- all mobile services offered by CMRS providers are CMRS and subject to the jurisdiction of the FCC pursuant to Section 332(c) of the Act.
  - A “mobile service is one that allows the end user to communicate while moving or from different locations.” While “fixed service requires the end user to be at a set location.” (Further Notice at ¶ 6, n.13).
  - Most wireless services offered today are clearly “mobile” in nature and thus, are CMRS.
  - Wireless handsets are being designed to look like traditional home or office CPE (e.g., Qualcomm) as additional customer options. These phones should be viewed from a regulatory perspective as what they are -- portable wireless devices which operate off of a wireless network.
  - Marketing characterization of these devices as “fixed” offerings is inaccurate and should be irrelevant to regulatory classification.
- All fixed services offered by all CMRS providers should be classified as “CMRS,” subject to the jurisdiction of the FCC (with one limited exception discussed below re: LEC local loop service).
  - Section 332(c) of the Act preempts state jurisdiction over CMRS; states are able to petition FCC for authority to regulate CMRS only when CMRS becomes a replacement for landline service for a “substantial portion” of a particular state.
  - Along with its adoption of a statutory scheme for CMRS regulation, Congress broadened the definition of mobile service in a manner that clearly allows fixed services to be regulated as CMRS.

# **Regulatory Classification of Fixed Wireless Services**

(2 of 2)

- A rebuttable presumption approach as proposed in the Further Notice:
  - would be contrary to Congress' mandate in Section 332
  - would be procedurally burdensome for both the FCC and CMRS licensees
    - proposed guidelines are unworkable (§ 54)
  - would place uncertainty around business plans
    - Further Notice recognizes that lack of clarity around “ancillary,” “auxiliary,” and “incidental” services resulted in carriers' hesitancy to proceed with fixed services (§ 8)
  - would limit licensees' flexibility and inhibit innovation thereby reducing competition and consumer choices
- Technological developments would thwart any effort to define “fixed” services:
  - Further Notice acknowledges that definitions tend to be restrictive and stifle technological advances.
  - as wireless systems develop, more integration of fixed and mobile technologies is occurring -- definitions would become obsolete

## **Corporate Structure Implications**

(1 of 2)

- Assumption: FCC will adopt affiliate requirement for BOC provision of CMRS services.

- FCC has stated that this requirement:

Lessens the opportunities for cost-shifting, price discrimination and interconnection discrimination, and increases the ability of both competitors and the Commission to detect any anti-competitive behavior. ¶ 117 CMRS Safeguards NPRM.

- With safeguards in place, BOC CMRS affiliate should be subject to same regulation as all other CMRS providers.
  - consistent with the federal goal of regulatory parity
  - CMRS is becoming increasingly competitive in all major markets.

## **Corporate Structure Implications**

(2 of 2)

- Applications in which the LEC uses fixed wireless local loops rather than wired technology as a means of providing basic telephone service to unserved areas, might appropriately be classified as non-CMRS.
  - Example: BETRS is not CMRS.

These proposals would preserve traditional state regulation over basic local exchange telephone service, while maintaining FCC authority over broadly-defined CMRS classification consistent with the intent of Congress.

# U S WEST Communications

## Fixed Wireless Loop

- **Technologies Tested or In Use At USWC**
  - Basic Exchange Telecommunications Radio Service (BETRS)
  - Very Small Aperture Terminals (VSAT) Satellite Technology (Hughes)
  - SR 500 System (SR Telecom)
  - MultiGain Wireless (Tadiran)
- **Possible Candidates For Future Evaluation**
  - Airloop (Lucent)
  - PACS (Hughes Network Systems)

# U S WEST Communications

## Basic Exchange Telephone Service

- **Status**

- USWC has 16 BETRS systems serving approximately 150 customers.

- **Characteristics:**

- Capacity: 500 subscribers per base station
- Operational Frequencies: 450 MHz
- Distance from Base Station: 37.5 miles
- Utility: Voice, data (2,400 bps maximum)

- **Assessment:**

- Mature technology

- **Concerns:**

- Limited functionality: voice quality, data rates.
- Limited access to channels for new system (Docket 96-18)
- Limited number of available channels leads to busy hour call blocking.
- Susceptible to industrial radio and paging interference.
- Co-channel and adjacent channel interference are common.
- Single source of equipment in USA.



# U S WEST Communications

## Very Small Aperture Terminal Satellite

- **Status**

- Tried by USWC in 1994 with 38 rural subscribers.

- **Characteristics:**

- Capacity: 7,000 subscribers per transponder
- Operational Frequencies: 12 Ghz Band
- Coverage: Entire USWC Region (from one transponder)
- Utility: Voice, very limited data

- **Assessment:**

- Remote equipment is easily transportable for reuse.
- May require a Hub in each LATA to avoid InterLata issues.

- **Concerns:**

- Very Expensive
- Slow data transmission rate, Sensitive to heavy rainfall.
- Potential for outages twice yearly of up to 8 minutes each day for six days when the sun intersects the satellite location on the geostationary arc.

# U S WEST Communications

## SR Telecom's SR 500 System

- **Status:**
  - Trialed by USWC in Three Locations 3Q95.
  - Not available for commercial use in USA
- **Characteristics:**
  - Capacity: 564 subscribers per base station
  - Operational Frequencies: 1.3 - 2.6 GHz
  - Distance from Base Station: 450 miles with repeaters
  - Utility: Voice, fax, data (bit rates up to 64 Kbps).
- **Assessment:**
  - Supports all standard services.
  - Repeater capability permits efficient wide area use.
  - Mature product, in use outside USA.
- **Concerns:**
  - Equipment not approved for operation in USA

# U S WEST Communications

## Tadiran's MultiGain Wireless

- **Status:**
  - Trialed by USWC in 1996
  - Presently In Use by USWC on a very limited scale
- **Characteristics:**
  - Capacity: 30 subscribers per system
  - Operational Frequencies: 2.4 GHz (ISM Band)
  - Distance from Base Station: 2 miles (LOS) - 6 miles (non-LOS)
  - Features: Voice, fax, data up to 64 Kbps by mid-1998
- **Assessment:**
  - Satisfactory performance
  - Supports all standard services.
- **Concerns:**
  - Questionable long term reliability (no interference protection from other ISM band users).
  - 1.8 - 2.0 GHz Compatibility Not Expected before Mid-1998

# U S WEST Communications

## LUCENT's Airloop

- **Status:**

- Expected Availability in USA middle of 1998

- **Characteristics:**

- Capacity: 40 subscribers per system
- Operational Frequencies : 3.4 - 3.6 GHz (CDMA), (2 GHz in 1998)
- Distance from Base Station: 3.5 miles (at 4 GHz)
- Features: Voice, data, up to 64 kbps, ISDN basic rate

- **Assessment:**

- Expected to support all standard services
- Expected to be capable of operating in either ISM or broadband PCS bands.

- **Concerns:**

- Long Term Quality Concerns if operated in ISM Band.
- Capability to Operate at 1.8 - 2.0 GHz; and 2.3 - 2.5 GHz Not Available until middle of 1998.

# U S WEST Communications

## Hughes Network Systems' PACS

- **Status:**
  - Expected Availability End of 1997
- **Characteristics:**
  - Capacity: 48 subscribers per system (min)
  - Operational Frequencies: 1.8 - 2.0 GHz
  - Distance from Base Station: 1 Mile
  - Utility: Voice, fax, data (up to 64 kbps)
- **Assessment:**
  - Comparatively low-cost
  - Expected to support all standard services
- **Concerns:**
  - Interface for Fixed Operation Not Yet Available
  - Limited Range
  - Equipment not approved for use in USA